DOCUMENT RESUME

ED 079 280 SP 006 687

AUTHOR	Graybeal, William S.
TITLE	Trends in Teacher Supply and Demand in Public Schools, 1973-1976.
INSTITUTION	National Education Association, Washington, D.C. Research Div.
PUB DATE	Jun 73
NOTE	5p.; NEA Research Memo Jun 1973
AVAILABLE FROM	Research, National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C. 20036 (No price quoted)
EDRS PRICE	MF-$0.65 HC Not Available from EDRS.
DESCRIPTORS	Beginning Teachers; Schools of Education; *Teacher Education; *Teacher Employment; Teacher Shortage; *Teacher Supply and Demand

ABSTRACT

This research report contains a descriptive analysis of tables on present and projected statistics of teacher supply and demand in the United States. Included are tables on enrollment in teacher education in 67 institutions, 1969-70 to 1972-73, by level; on graduates prepared to teach and graduates receiving the bachelor's and first professional degree, 1968 to 1972, and projections to 1976; and on the projected supply and demand for beginning teachers in public schools, 1972 to 1976. It is indicated in this last table that if the projected number of teacher education graduates is realized and if the trends towards improved school staffing continue, there may be annual reductions in the oversupply of beginning teachers from 1974-75 on. (JA)

ED 079280

U S DEPARTMENT OF HEALTH EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY
NEA
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

NEA RESEARCH MEMO
Research
National Education Association
1201 Sixteenth Street, N.W. • Washington, D.C. 20036

Research Memo 1973-8 June 1973

TRENDS IN TEACHER SUPPLY AND DEMAND IN PUBLIC SCHOOLS, 1973-1976

OVERVIEW: Enrollment information from 67 of the nation's largest teacher preparation institutions suggests that graduating classes of potential teachers will be smaller in 1973 and in at least three subsequent years than they were in 1972. If these institutions are representative of all teacher education institutions, the number of graduates completing preparation to enter teaching in 1976 will be only two-thirds of the number in 1972, and the ratio of graduates seeking teaching jobs to the number of jobs open to them will be about 1½ to 1 instead of the almost 2 to 1 in 1972.

Publicity about the current job shortage for teachers and the strong likelihood of its increasing has made high-school and college students aware of the probability of increasing competition in the future for jobs in teaching. Also, enrollment data for 1972-73 show that the historic trend of annual increases in the proportion of the college-age population enrolled in higher education may have ended. These two conditions may make the future numbers of graduates completing preparation to enter teaching smaller than the numbers expected from a continuation of past trends.

NEA Research conducted a special survey of undergraduate enrollments in teacher education in a sample of institutions to estimate the extent of a forthcoming change, if any, in the normal trends in the number of college graduates completing certification requirements for teaching. This survey supplements the current data being collected for the 1973 study of teacher supply and demand, and was directed to the 124 institutions which reported graduation of at least 500 prospective teachers in 1967 (the most recent year for which institutional data are available). The institutions were asked to report the number of students enrolled in teacher education by level (freshman, sophomore, junior, and senior) for each academic year from 1969-70 through 1972-73. The questionnaires were mailed

SP 006 687

TABLE 1.–ENROLLMENTS IN TEACHER EDUCATION IN 67 INSTITUTIONS, 1969-70 TO 1972-73, BY LEVEL

Level	Number of institutions	1969-70 Enrollment	1970-71 Enrollment	1970-71 Percent of 1969-70	1971-72 Enrollment	1971-72 Percent of 1969-70	1972-73 Enrollment	1972-73 Percent of 1969-70
1	2	3	4	5	6	7	8	9
Freshman	36	36,389	34,687	95.3	28,342	77.9	24,723	67.9
Sophomore	38	34,068	33,836	99.3	33,123	97.2	26,588	78.0
Junior	55	53,728	55,270	102.9	54,682	101.8	50,381	93.8
Senior	57	54,885	57,966	105.6	59,985	109.3	56,143	102.3

FILMED FROM BEST AVAILABLE COPY

in January, and by April 2, 1973, responses had been received from 70 institutions, 56.5 percent of those surveyed.

The summary in Table 1 shows the enrollment trend data from the 67 institutions which were able to report some or all of the data requested. The number of institutions reporting data for juniors and/or seniors is about one-half larger than the number reporting data for freshmen and/or sophomores. Because students in many institutions are not "enrolled" in teacher education prior to the junior year, the future number of teacher education graduates may not be projected accurately for more than one year beyond the year of this type of survey.

A comparison of the enrollments over the four sessions indicates that the number of graduates completing preparation to enter teaching probably will be smaller in 1973 than in either of the two preceding years, and probably will continue to decrease each year through 1976. The enrollment data for freshmen in teacher education in the 36 institutions suggests that the number of teacher education graduates in the class of 1976 may be only two-thirds of the number expected to graduate in the class of 1973.

The trends shown in total enrollments in teacher education at a given level are not uniformly observed among the reporting institutions. For example, at the junior year the percents of 1969-70 enrollments represented by 1972-73 enrollments in these 55 institutions range between 57.0 percent and 153.2 percent with a median of

TABLE 2.—GRADUATES PREPARED TO TEACH AND TOTAL GRADUATES RECEIVING THE BACHELOR'S AND FIRST PROFESSIONAL DEGREE, 1968 TO 1972, AND PROJECTIONS TO 1976

Year	Graduates completing preparation to enter teaching[a]	Total graduates receiving bachelor's and first professional degree[b]	Teacher education graduates as percent of total graduates[c]
1	2	3	4
1968	233,281	666,710	35.0
1969	264,217	764,185	34.6
1970	184,276	827,234	34.4
1971	313,558	877,676	35.7
1972	324,099	903,000[d]	35.9
1973	312,725[e]	958,000[d]	32.6
1974	295,550[e]	990,000[d]	29.9
1975	252,775[e]	1,047,000[df]	24.1
1976	219,400[e]	1,100,000[df]	19.9

[a] From: NEA Research Report 1972-R8, *Teacher Supply and Demand in Public Schools, 1972,* and previous editions of this series. Includes graduates prepared to teach in elementary, secondary, or special education classes. Does not include librarians, counselors, and other supportive positions. 1972 information is a compilation of institutional estimates; other information is the compilation of institutional reports of the actual number of graduates as listed in the NEA Research report of the subsequent year.

[b] From: U. S. Department of Health, Education, and Welfare, Office of Education. *Projections of Educational Statistics to 1980-81.* 1971 edition. Washington, D. C.: Government Printing Office. p. 43.

[c] Percents are about 0.2 percentage points below figures listed for these ratios in *Teacher Supply and Demand in Public Schools, 1972,* because librarians are not included as teachers in the calculations for this table.

[d] Projected.

[e] Projected from enrollment information in the current survey.

[f] Trends in first-time enrollment in degree-credit instruction reported by the U. S. Office of Education for 1972-73 indicate a strong likelihood that projected growth in number of graduates in 1975 and 1976 may not materialize.

88.3 percent. In 19, or 34.5 percent of these institutions, enrollment in teacher education in 1972-73 was equal to or greater than it was in 1969-70. In nine institutions the 1972-73 enrollment was at least one-fifth larger than it was in 1969-70. On the other hand, enrollment in 1972-73 was less than 80.0 percent of the enrollment reported for 1969-70 in 23.6 percent, or 13 of the 55 institutions.

To derive a projection of the number of graduates expected to complete initial certification requirements annually between 1973 and 1976, it was assumed that the responding institutions were representative of all teacher education institutions, and the enrollment information for 1972-73 was compared with information for the same class level in an appropriate previous session.[1] The resultant ratios were applied to the national total number of teacher education graduates with a bachelor's degree in 1972 (reported in NEA Research Report 1972-R8, *Teacher Supply and Demand in Public Schools, 1972*). The resulting estimates of the number of bachelor's degree graduates prepared to teach were increased by 13.9 percent to reflect an assumption that the number of graduates completing initial certification requirements with a master's degree will represent the 1972 percent of the number of graduates completing these requirements with a bachelor's degree. These procedures produced the following projections of the numbers of graduates completing initial certification requirements for public-school teaching in 1972-73 and three subsequent years:

Session	Projected number of graduates completing preparation with a bachelor's degree	Projected total number completing preparation
1972-73	274,550	312,725
1973-74	259,500	295,550
1974-75	221,925	252,775
1975-76	192,625	219,400

The ratio of the number of freshmen enrolled in teacher education in 1969 to the number enrolled in 1972-73, applied to the projected number of teacher education graduates in 1973, provides an alternate estimate of 186,450 graduates with a bachelor's degree and a total of 212,350 graduates completing certification requirements in 1975-76. This total estimate is 3.2 percent lower than the number listed above.

If the enrollments in the institutions participating in this survey are representative of enrollments in all teacher education institutions, there may be a change ahead in the proportion of higher education graduates who prepare to teach, shown in Table 2. Even if the projected growth in total numbers of bachelor's and first professional degree graduates in 1975 and 1976 does not materialize, the projected numbers of teacher education graduates are likely to represent a decreasing proportion of all graduates at that time.

Estimates of Trends from Other Studies

Parker's most recent annual survey of college enrollments[2] reports that full-time enrollment in teachers colleges declined by 5.6 percent in 1972 and by 0.7 in 1971. Because these data are based on information reported by institutions classifiable as teacher-preparation institutions (only 34 in 1972-73), they may not represent national trends.

Biennial sampling surveys of college and university freshmen by the American Council on Education reported the following percents indicating a probable career of teaching in elementary or secondary schools: 21.7 percent in 1966; 23.5 percent in 1968; 19.3 percent in 1970; and 12.1 percent in 1972.[3] Application of these percents to the number of first-time students in degree-credit instruction provides a projection of the following numbers of graduates prepared to teach: 299,026 graduates in 1970; 382,991 in 1972; 342,606 in 1974; and 212,476 graduates in 1976. The number of teacher education graduates projected for 1970 from the number of freshmen in 1966 was 5.2 percent above the number NEA Research reported for 1970 (284,276). However, the number similarly projected for 1972 from the survey of freshmen in 1968 is higher by 18.2 percent than the 324,099 reported for 1972 by NEA Research.

The relatively small differences between the information reported by NEA Research and the projection from ACE data for 1970 is misleading in view of the lack of attention such a projection can give to normal attrition of college freshmen during their four years in college, and the presence of some graduates with a master's degree in the NEA Research report of the total number of teacher education graduates. The difference of 18.2 percent between the projection from ACE data and the NEA Research figure for 1972 possibly demonstrates some of the effects of a change in the outlook for teaching jobs upon college students who in their freshman year had planned to prepare for this field.

The projected numbers of teacher education graduates in 1974 and 1976 based on ACE data are 15.9 percent above and 3.2 percent below, respectively, the numbers estimated from data reported in the current special survey of teacher education enrollments in higher education. The proportion of

TABLE 3.–PROJECTED SUPPLY AND DEMAND FOR BEGINNING TEACHERS IN PUBLIC SCHOOLS, 1972 TO 1976

Session	Supply of beginning teachers[a]	Demand for beginning teachers[b]	Difference	Supply as percent of demand
1	2	3	4	5
1972-73[c]	243,200	132,100	111,100	184.1
1973-74	234,550	111,300	123,250	210.7
1974-75	221,675	110,400	111,275	200.8
1975-76	189,575	102,500	87,075	185.0
1976-77	164,550	115,100	49,450	143.0

[a]Estimated number of graduates completing preparation to teach was multiplied by 75.0 percent–consistent with the projected entry rate of teacher education graduates if jobs were available (potential entry rate of 83.3 percent of graduates prepared for elementary-school positions, 76.2 percent of those prepared to teach in special education, and 69.2 percent of those prepared to teach in secondary-school assignments).

[b]Estimated number of positions to be added (or subtracted) plus the number of positions normally open to beginning teachers as a result of teacher turnover. Turnover-created demand is for replacement of 8.2 percent of the staff of the preceding session: the number of beginning teachers would be equal to 5.2 percent and the number of re-entering teachers would be equal to 3.0 percent of the teachers employed for the previous session.

[c]Estimates published in the NEA Research Report 1972-R8, *Teacher Supply and Demand in Public Schools, 1972.*

freshmen surveyed by ACE who were undecided about their probable career increased during the four-year period of these studies (from 4.3 percent in 1966 to 13.9 percent in 1972). This uncertainty, accompanying a tight job market for almost all graduates increases the difficulty of accurately projecting numbers of graduates from data about career intentions of freshmen.

Projection of Teacher Supply and Demand

The projected supply of beginning teachers based upon teacher education enrollments reported in this special survey is compared with the estimated number of jobs open to them in Table 3. Details about the assumptions underlying these projections are given in the NEA Research Report 1972-R8, *Teacher Supply and Demand in Public Schools, 1972.* This comparison shows that if the projected numbers of teacher education graduates are realized and if trends toward improved school staffing continue, there may be annual reductions in the oversupply of beginning teachers from 1974-75 on.

The projected demand for beginning teachers listed in Table 3 may be a minimum estimate because many school systems may prefer to fill their vacancies with a "normal" ratio of beginning and experienced teachers which, in a period of stable or decreasing enrollments, could reduce the number of jobs normally projected to be open to qualified experienced teachers. Data from the follow-up study of 1971 teacher education graduates and from a sampling study of all teachers in 1971-72 indicate that the number of 1971 graduates securing employment as teachers exceeded the normal projection by one-sixth to one-third. The estimated numbers of beginning teachers actually employed in 1971-72 from these two studies are 167,100 and 147,600, respectively, while the projected normal demand was for 125,300 beginning teachers. If these 20,000 to 40,000 positions are filled by beginning teachers, the over-all problem is not changed because the effects of the oversupply then apply to this number of qualified experienced teachers who normally would be employed in these positions following a transfer to a new school system or following an interruption of at least one-year from active service.

FOOTNOTES

[1] Where possible the numbers of graduates were projected from the ratios of the enrollment in the class which graduated in 1971-72 to enrollment reported for the same level in 1972-73. The following comparisons provided the indicated ratios to be applied to the number of teacher education graduates reported for 1971-72: to estimate graduates in 1972-73, the ratio of the number of seniors in 1972-73 to the number of seniors in 1971-72 or 96.5 percent; to estimate graduates in 1973-74, the ratio of the number of juniors in 1972-73 to the number of juniors in 1970-71 (the class of 1971-72) or 91.2 percent; to estimate graduates in 1974-75, the ratio of the number of sophomores in 1972-73 to the number of sophomores in 1969-70 (the graduating class of 1971-72) or 78.0 percent. To estimate graduates in 1975-76, the ratio of the number of freshmen in 1972-73 to the number of freshmen in 1971-72 (the class of 1974-75) or 86.8 percent (using data from 37 reporting institutions), and was applied to the number of teacher education graduates already projected for 1974-75.

[2] Garland G. Parker, "College and University Enrollments in America, 1972-73: Statistics, Interpretation, and Trends." *Intellect* Volume 101, February 1973, and reports with the same title in *School and Society* Volumes 99 and 100, February 1971 and 1972.

[3] Summarized in "Freshmen Found Growing More Conservative, Reversing Trend" in *Chronicle of Higher Education*, Volume 7, February 12, 1973. The estimated total number of freshmen are listed as first-time students in resident and extension degree-credit programs in U. S. Department of Health, Education, and Welfare, Office of Education, *Digest of Educational Statistics, 1971* and from Pre-Publication Release of Preliminary Data on Opening Fall Enrollment in Higher Education, by Institutional Control and Level, December 1972.

Prepared by William S. Graybeal
Educational Manpower and Higher Education